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**JC20 Rec'd PCT/PTO 19 MAY 2005**

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*Via Facsimile with  
Mail Confirmation*

14 March 2005

**International Patent Application PCT/EP03/12881**  
**ExxonMobil Chemical Patents Inc. Et Al**  
**Our ref.: 2002M179**

Dear Sirs,

This responds to the Written Opinion dated 31 January 2005, which set a reply period of one month and fifteen days.

We are filing herewith new page 31 which should replace page 31 as currently on file. For the convenience of the Examiner, we also enclose the original page 31 showing, interlinearly, the amendments that have been made to claims 1 and 7.

Claim 1 has been amended to specify that the hydrogenation produces the corresponding cyclohexyl derivative. This addresses the objection raised in paragraph 5 of the Written Opinion. Basis for this amendment is to be found in the description at page 5, lines 3 and 4.

Claim 1 has also been amended to specify that at least one of the ordered mesoporous materials required as the catalyst support is an ordered mesoporous silica. Basis for this amendment is to be found at original claim 7 and at many places in the description, for example page 16, lines 11-12.

Claim 7 (the subject matter of which is now incorporated into claim 1) has been amended to specify that the ordered mesoporous silica is a metallosilicate. Basis for this amendment is to be found, for example, at page 13 line 40 to page 14 line 3.

The Written Opinion discusses prior art documents D1 (US-A-5286898) and D2 (US-B1-6284917). The Written Opinion acknowledges novelty for certain of the original claims over D1 and D2. In particular, the subject matter of original claim 7, now incorporated into claim 1, is acknowledged to be novel.

PC MASTER UPDATED

16 MAR 2005

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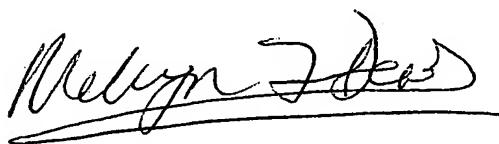
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**10/535531**

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With regard to inventive step, the Written Opinion regards D2 as being the closest prior art to the subject matter of original claim 7, and the Examiner has helpfully pointed out, by a problem/solution analysis, that the subject matter of original claim 7 can be considered as involving an inventive step. The Applicants concur with the Examiner's assessment of original claim 7, and accordingly, the incorporation of the feature of original claim 7 into amended claim 1 now makes amended claim 1 and all its dependent claims both novel and inventive over the cited prior art.

The amendments submitted are considered to overcome all the objections raised and, accordingly, the Applicants now look forward to receipt of a positive IPER in due course.

Yours faithfully,



Dew, Melvyn John  
General Authorisation Nr. 55

Encl.: Replacement page 31 (claims 1-7)  
Interlinearly amended original claim 31 (mail confirmation only)  
Form 1037 (mail confirmation only)

CLAIMS

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1. A process for hydrogenating, to the corresponding cyclohexyl derivative, one or more benzenopolycarboxylic acids or one or more derivatives thereof, or a mixture of one or more benzenopolycarboxylic acids or one or more derivatives thereof by bringing the benzenopolycarboxylic acid or the derivative thereof or the mixture into contact with a hydrogen-containing gas in the presence of a catalyst, said catalyst comprising one or more catalytically active metals applied to a catalyst support comprising one or more ordered mesoporous materials, at least one of which materials is ordered mesoporous silica.  
5
2. A process as claimed in claim 1 wherein the catalyst support further comprises one or more macroporous materials combined in admixture with the one or more ordered mesoporous materials.  
10
3. A process as claimed in claim 1 wherein the catalyst support further comprises one or more mixed porosity materials combined in admixture with the one or more ordered mesoporous materials.  
15
4. A process as claimed in claim 3 wherein the mixed porosity material contains mesopores and macropores.  
20
5. A process as claimed in any one of claims 2 to 4 wherein the macroporous or mixed porosity materials are amorphous.  
25
6. A process as claimed in any one of claims 2 to 5 wherein at least one of the macroporous or mixed porosity materials is alumina.
- 30 7. A process as claimed in any one of the preceding claims wherein the ordered mesoporous silica is a metallosilicate.

CLAIMS

, to the corresponding cyclohexyl derivative,

1. A process for hydrogenating one or more benzenopolycarboxylic acids or 5 one or more derivatives thereof, or a mixture of one or more benzenopolycarboxylic acids or one or more derivatives thereof by bringing the benzenopolycarboxylic acid or the derivative thereof or the mixture into contact with a hydrogen-containing gas in the presence of a catalyst, said catalyst comprising one or more catalytically active metals applied to a catalyst support comprising one or more ordered mesoporous materials, *at least one of which materials is ordered mesoporous silica.*
2. A process as claimed in claim 1 wherein the catalyst support further comprises one or more macroporous materials combined in admixture 10 with the one or more ordered mesoporous materials.
3. A process as claimed in claim 1 wherein the catalyst support further comprises one or more mixed porosity materials combined in admixture 15 with the one or more ordered mesoporous materials.
4. A process as claimed in claim 3 wherein the mixed porosity material contains mesopores and macropores.
5. A process as claimed in any one of claims 2 to 4 wherein the macroporous 20 or mixed porosity materials are amorphous.
6. A process as claimed in any one of claims 2 to 5 wherein at least one of the macroporous or mixed porosity materials is alumina.
7. A process as claimed in any one of the preceding claims wherein ~~at least one of the~~ *ordered mesoporous materials is ordered mesoporous silica, is a metallosilicate.*